mistake to give up the carrot too soon. Once an RBOC gets interLATA authority, its sole business incentive for cooperating in opening its network to competition will disappear. InterLATA authority should not be granted based on promises that the RBOC will have in place well-functioning methods for large-scale provision of UNEs at some time in the future. The state public utility commissions and the Federal Communications Commission cannot judge how well the UNE process is working until they actually see it in practice and have a chance to address the inevitable practical problems of implementation that will arise.

16. It is critical to note that an RBOC's incentives to discriminate (e.g., by placing artificial roadblocks to the smooth functioning of the unbundled element market) will increase significantly once competition develops at the retail level. For initial and small losses of retail business to the entrant, the RBOC's most profitable strategy will be to maintain its retail price and accept the loss of business, rather than cut prices more broadly. But as the amount of retail business that the entrants capture increases, at some point the RBOC will find it profitable to cut price to stem the loss of business. At that point the incentive to restrict (or increase the price of) the CLECs' purchases of unbundled network elements increases dramatically, since an increase in CLEC costs and hence prices now allows an RBOC to increase prices to its retail customers as well. It is thus important that the Commission recognize that RBOC incentives to frustrate local entry will be even higher in the future than they are today. This makes giving up the carrot too soon even more unwise.

E. Regulation will not be sufficient to prevent an RBOC from discriminating against its competitors

17. Faced with the undeniable incentives for anticompetitive behavior, advocates of RBOC entry into interLATA markets argue that modern regulation is more than capable of controlling anticompetitive behavior.[11] In short, they believe that regulation is capable of the intricate and detailed regulation that would be necessary to prevent a regulated firm from following the profit motive and engaging in the anticompetitive behavior that is so uniquely profitable for regulated monopolists. In contrast, we believe that competition is far better able than regulation to protect consumers and that delaying RBOC entry until local competition has developed will reduce the necessity for detailed regulation in the future. It is troubling that, after regulation has been largely removed from the long-distance business, RBOC entry into long-distance service is being considered while the RBOCs' regulated local bottleneck remains almost completely intact. Even the RBOCs' advocates recognize that the RBOCs' near-term entry requires the reintroduction of detailed regulation of their long-distance activities in order to control their anticompetitive incentives to leverage market power. AT&T has only recently been deregulated. The RBOCs' entry, even according to its advocates, reintroduces the ability to play the regulation game as an

---

[11]The RBOCs' witnesses also advance a straw man. They argue that an RBOC is unlikely to achieve market power or dominance in the interLATA business given regulatory constraints on anticompetitive behavior and the alleged implausibility of inducing the exit of any of the major incumbent long-distance carriers. But discriminatory behavior would be socially inefficient even if it did not result in a high enough long-distance market share to suggest an RBOC had obtained market power in interLATA service. Discrimination is a way of exercising local market power (by evading the regulators' limits on the prices or profits allowed in the local monopoly). This exercise of market power is privately profitable but socially harmful to long-distance consumers (by reducing output and raising price) even if the RBOC is unable to, in addition, obtain market power in long-distance service.

important determinant of competitive success in long distance. This would be truly unfortunate. Even remotely effective regulation would be very expensive. Moreover, there is strong reason to believe that regulation, as practiced, will not effectively prevent anticompetitive behavior.

18. Regulators face severe limitations in attempting to prevent RBOCs from acting on their anticompetitive incentives. For one thing, regulators are often unwilling or unable to impose penalties sufficient to dissuade an ILEC from refusing to obey the regulator's procompetitive orders in a timely fashion. The status quo then favors the ILEC in competition with other telephone companies. As long as the ILEC earns more money from disobeying a clear regulatory directive than it stands to lose from disobeying the directive, procompetitive orders will be ignored. The primary recent examples are the states, such as Minnesota and Michigan, where RBOCs have ignored Commission directives to implement one-plus dialing parity for intraLATA toll service. Rather than implement the directives subject to appeal, the RBOCs have sometimes simply refused to obey the orders while they appealed. Thus, at a minimum, the RBOCs can profitably delay implementation of Commission orders they do not like.

19. A minor variation on this theme entails taking the narrowest possible interpretation of one's legal obligations. Thus, for example, an RBOC might declare that a particular form of subloop unbundling is not technically feasible, even though it knows it is feasible. When caught, it may then obey regulators' orders to inform customer-competitors who ask that the unbundling is feasible. At that point, however, the customer-competitor still may not have procured the

necessary unbundled network elements due to further RBOC foot dragging. Rather, negotiations may then proceed to other issues, where the RBOC may take a similarly narrow view of its legal obligations to negotiate in good faith.[12]

20. Even where an active regulator might hope to prevent many affirmative misdeeds or overt acts of commission, regulators will find it almost impossible to enforce a nondiscrimination standard against omissions or failures to act. For example, it would be difficult to detect an RBOC's failure to treat unaffiliated and affiliated companies the same with respect to R&D projects, or failure to fund capital projects that benefit a long-distance rival at the expense of an RBOC's own long-distance affiliate.

21. Consider, for example, what would happen when an IXC needed the technical cooperation of an RBOC to introduce technical changes in long distance, either in the form of

---

[12]This example is not hypothetical. For example, in negotiations with a new CLEC, BellSouth claimed that the particular form of subloop unbundling the carrier requested was not technically feasible. Several months later, the same CLEC was surprised to find that BellSouth's proposed SGAT in Georgia offered precisely the form of subloop unbundling that BellSouth had earlier declared infeasible on technical grounds. When the CLEC's witness complained about this apparent failure to negotiate in good faith, counsel for BellSouth proudly told the Georgia Commission that once it and two other state commissions had ordered BellSouth to stop telling CLECs that the requested unbundling was infeasible, they obeyed the orders and no longer told CLECs that the requested unbundling was technically infeasible. See cross-examination testimony of Julia Strow of Intermedia Communication Inc., Before the Georgia Public Service Commission, In the Matter of: Consideration of BellSouth Telecommunications, Inc. Services pursuant to Section 271 of the Telecommunications Act of 1996, Docket 6863-U, Transcript at 2252-56 (February 27, 1997). The incident is also discussed in Ms. Strow's direct testimony before the Georgia Public Service Commission filed Feb. 13, 1997, at pp. 18-20.

capital expenditures by the RBOC, or collaboration with the RBOC on technical interconnection issues. So long as the RBOC viewed a ban on its participation in interLATA toll as likely to be in place over the foreseeable future, it would have had an unambiguous financial incentive to cooperate with the IXC, since improved quality or lower prices for long-distance service would increase the demand for access and thereby benefit the RBOC. Once the RBOC integrates into long distance, however, its calculation would change. Any new competitive success by the IXC would come, in part, at the expense of the RBOC's long-distance unit, reducing or eliminating its financial incentives to cooperate with the IXC in facilitating efficient innovation.

22. Even in the absence of conflicting incentives, companies at successive stages are still sometimes unable to reach agreement on technical collaboration, perhaps because they have differing views on the technical merits of a project, or on costs to be borne by each party. Because technical collaboration often breaks down even when none of the players has anticompetitive incentives, it would often be impossible to determine with certainty in a given instance that an RBOC's decision not to cooperate with an IXC was due to anticompetitive motivation rather than to an ordinary commercial disagreement. Such uncertainty is particularly important because it could prevent the regulator from imposing tough penalties on the RBOC if and when the regulator does decide that the company probably has behaved anticompetitively. In the terminology of law and economics, a high probability of a "false positive" (behavior is deemed anticompetitive when in fact it is not) means that behavior that is not always detected and punished cannot be efficiently deterred using large penalties. Significantly greater regulatory

oversight and expenditure is required in such cases since, absent penalties, anticompetitive behavior can only be deterred by reducing the probability of a "false negative" (an incorrect finding of no anticompetitive behavior) to a minimal level. Translated into common terminology, this means that if you do not severely punish bad behavior, you have to catch almost every violation.

23. Regulation of access and interconnection will be especially prone to failure when technology is changing rapidly. Even if reasonable requirements were established for the old technology, those regulations would soon become obsolete, along with that technology. Consumers of access services and regulators must then examine anew whether the restrictions with its rivals are reasonable or not. As we discuss below, this makes the regulatory progress prone to reversibility; i.e., regulations that worked well yesterday won't work well tomorrow.

24. Perhaps the best historical examples of the effects of information limitation on regulators are from the equipment side of the AT&T case. AT&T committed to various regulators that it would not discriminate against independent equipment suppliers. However, the Bell System found a whole series of seemingly plausible excuses for purchasing from Western Electric. Regulatory oversight of the Bell System's procurement practices was ineffective. Antitrust action, with extensive after-the-fact discovery, was necessary to prove that there were in fact abuses. But only divestiture — with the associated rapid fall in the share of the RBOCs'

purchases from Western Electric — could really establish the existence and strength of the bias toward internal purchase in the integrated AT&T.

F. Examples of discrimination by LECs against their competitors

25. There are many examples of ILECs behaving anticompetitively in markets that depend on access to their bottleneck facilities.

a) In Michigan, Ameritech has repeatedly challenged (and sought to overturn or delay) the PUC's orders to provide intraLATA one-plus presubscription. Ameritech's refusal to accommodate market-opening regulations has seriously slowed the development of intraLATA toll competition.

b) Ameritech initiated "PIC freezes" in three of its five states, just when those intraLATA markets were opened to presubscription.[13] Moreover, the PIC-freeze solicitations were found, at least in Illinois and Ohio, to be anticompetitive.

c) The growth of local competition in Grand Rapids, Michigan was blunted by Ameritech's interconnection tariffs, which were rejected five times by the Michigan Public Utilities Commission.[14] The growth of the local entrant, US Signal (now Brooks Fiber), fell far short of plan, and its legal fees in the first year of operation far exceeded its revenues.[15]

---

[13]The PIC freezes raise the costs of changing carriers which, given Ameritech's large share of intraLATA traffic, inflicts far greater costs on its rivals than on itself.

[14]In Georgia, ACSI raised similar objections to BellSouth's behavior. It filed a complaint with the Commission that BellSouth failed to install requested services needed for local service in a timely fashion.

[15] Douglas Bernheim and Robert Willig, The Scope of Competition in Telecommunications, AEI Studies in Telecommunications Deregulation, Oct. 1996, at pp. 85-86.

d) Bell Atlantic delayed introduction of ISDN capability for PBX trunks until over a year after it had introduced the ISDN feature for its competing CENTREX service.[16]

e) In cellular service, Bell Atlantic resisted testing new service implementation with McCaw until the new features had been tested and implemented for its own cellular operation in Pittsburgh.[17]

f) BellSouth strategically altered the timing of unbundled network features in an effort to favor its own MemoryCall service.[18]

g) The Kentucky and Florida Public Service Commissions found that BellSouth had engaged in anticompetitive business office practices to disadvantage its intraLATA rivals. Such practices are quite difficult to monitor.

h) SNET has already achieved significant market shares in interLATA long distance (various press reports attribute to SNET 25-34% of customers and a much smaller percentage of revenues). That share cannot be readily explained by pricing since SNET's prices are not lower than the calling plans other long-distance carriers are offering. SNET's current share itself may be the result of discrimination. SNET terminated its billing arrangement with AT&T after its own interLATA entry and began advertising that customers could now receive one bill through SNET but not AT&T.[19] Absent incentives to discriminate against (or to withhold cooperation from) rival IXCs, SNET's decision to terminate its billing arrangement for AT&T is puzzling. Although AT&T had plans to bill on its own in the future, it would have been profitable for SNET, absent an incentive to discriminate, to continue to bill for AT&T until AT&T was ready to make the switch. Instead SNET abandoned the profits it was earning on billing for AT&T. Why? Ending the billing arrangements with AT&T must have resulted in an

---

[16] Id., Chap. 4 at 95.

[17] Id., Chap. 4 at 94-95.

[18] Id., Chap. 4, at 97, citing In the Matter of the Commission's Investigation Into Southern Bell Telephone and Telegraph Company's Provision of MemoryCall Service, Order of the Georgia Public Service Commission, docket No. 4000-U (May 21, 1991).

[19] SNET's market share has come predominantly from AT&T. SNET has continued to bill for other long-distance carriers, so the other IXCs were able to continue "one-bill" service to their customers after SNET's entry.

increase in profits in other markets that more than offset the profits lost from ending the billing arrangement.

i) For almost ten years US WEST successfully resisted orders from the Minnesota regulator to provide one-plus intraLATA dialing.

26. It is especially important to note that all of these actions were done in the face of regulation by state commissions. Moreover, to the extent these actions were caught by state commissions, it was only after the fact -- in many cases, well after the competitive harm had already been done. The RBOCs retained the benefits of the past anticompetitive behavior whenever, as is usually the case, the only penalty for being caught was an order to cease the offending behavior.

III. ACCESS PRICING

27. The Federal Communications Commission's decision on access price reform has important implications for the proper timing of RBOC long distance entry. The Commission decided against prescriptively reducing access prices to economic cost. The access revenues of the ILECs will be reduced, but not by anything close to the amount necessary for the revenues collected to be commensurate with the economic costs of access. The Commission also decided to restructure access prices so that non-traffic-sensitive costs will gradually be recovered through fixed charges rather than through per-minute charges. In particular, certain traffic-sensitive costs that were formerly recovered through per minute charges to the IXCs will gradually be recovered through a monthly, per-customer charge paid by the IXCs. This restructuring will gradually

reduce the competitive pricing advantage the RBOCs will have in long distance service. However, because the restructuring occurs only gradually, the near-term entry by an RBOC into in-region, interLATA service will give it a competitive pricing advantage for long-distance service (and for bundled services that include long distance) unrelated to the cost efficiency of its long-distance operations. The RBOCs' pricing advantage is discussed in detail below.

28. The restructuring of access payments by the IXCs is inefficient for another reason.[20] The new monthly fixed charge paid by IXCs, the primary interexchange carrier charge ("PICC"), will have perverse consequences. The PICC will raise the cost for IXCs of serving low-volume

---

[20]The Commission recognizes that for end-users, efficient pricing requires that non-traffic sensitive (fixed) costs should not be recovered through traffic-sensitive prices. As an example, a two-part price schedule, with a per-unit (traffic-sensitive) payment to recover variable (traffic-sensitive) costs and fixed payment to cover all other costs, is the efficient way to price to end-users. However, the same principle does not apply with respect to products sold to intermediate buyers such as IXCs, who buy access from LECs and then sell their product to final consumers. Two-part pricing of inputs sold to intermediaries is often not efficient. The fixed or lump-sum payment raises the fixed costs of downstream companies and can reduce downstream output by reducing the number of viable competitors downstream. (See Janusz Ordover and John Panzar, "On the Nonlinear Pricing of Inputs," *International Economic Review*, October 1982.) Indeed, two-part pricing of inputs, such as the FCC is proposing for primary interexchange carrier charges ("PICCs") paid by IXCs, is often not only inefficient, it can be anticompetitive and exclusionary as well. (See Kenneth C. Baseman, Frederick R. Warren-Boulton and Glenn A. Woroch, "Microsoft plays hardball: the use of exclusionary pricing and technical incompatibility to maintain monopoly power in markets for operating system software," *Antitrust Bulletin*, Summer 1995.)

In this case, the exit induced at the downstream level by the lump-sum payment is not the exit of the entire firm but rather the exit of downstream firms from particular market segments (e.g., low-volume customers). Where direct or deliberate exit is not politically feasible (that is, an IXC may not be allowed to discontinue service to customers who presubscribe to it, but on whom it loses money), the PICC still reduces the incentives of IXCs to compete aggressively to serve the unprofitable segment. If the IXCs are allowed to flow through directly the per-line charges they pay as per-line charges to consumers, then the effect on universal service is the same as if the per-line charge were placed directly on consumers in the first place.

customers. Ironically, the Commission's stated rationale for placing the new fixed charges on the IXCs rather than the end-users was a fear that too many users may discontinue phone service if the fixed monthly cost for service increased. Instead, the Commission decided to place the fixed monthly charge on the IXCs. But this merely increases the customer-specific fixed costs for the IXCs to reach these customers. When low-volume customers become less profitable to serve, the financial incentive for the IXCs to compete to serve them is reduced. Indeed, because very low-volume customers are now unprofitable for IXCs given the current level of customer-specific fixed costs, the PICC will only exacerbate the problem. It is indeed ironic that the FCC is raising the costs for the IXCs to serve low-volume customers, while the RBOCs are arguing that they should be allowed into long-distance service in order to correct a perceived lack of competition for the patronage of low-volume customers. To the extent the RBOCs' allegations that more competition is needed for low-volume customers have any merit at all, the last thing the Commission should do is increase the costs the IXCs must bear to serve these customers.

A. Access prices should be reduced to economic cost before an RBOC is allowed to provide in-region, interLATA service.

29. Reducing access prices to economic cost is highly desirable, especially to the extent that widespread, effective local competition is not in place prior to the time when an RBOC is permitted to provide in-region, interLATA service. First, reducing prices to cost is economically efficient. With the advent of local competition, access reform provides proper cost signals to the

entrants. With access prices well above cost, inefficient entry could be attracted. This is undesirable. Society does not benefit from entry for entry's sake. Entry by efficient firms improves welfare. Entry by inefficient firms might do so, but only by accident. The FCC correctly stressed the importance of establishing the proper "make versus buy" incentives when it published its preference for cost-based pricing of unbundled network elements. Exactly the same logic applies to access charges. Access charges set well above cost induce inefficient firms to enter and "make" their own access, rather than buy access from lower cost suppliers.

30. Second, as we noted above, under current and future access policies where IXCs must pay per minute access charges far in excess of the ILECs' economic costs, an ILEC integrated into interLATA service would have several advantages in competing against other long-distance companies that are unrelated to its cost efficiency or the quality of its products. When an ILEC provides long-distance service, its private marginal cost of access is the same as the true economic marginal cost of providing access (the social cost): The regulated price of access determines only the transfer price between its local exchange and long-distance divisions. For an independent IXC, however, the private marginal cost of access is the regulated access price as long as it must pay access charges to the ILEC. In several important circumstances, the ILEC's private calculation of the "opportunity costs" of taking business away from an IXC will not include the full access profits they would have earned had the business stayed with the IXC.

a) The ILEC can profitably engage in a variety of non-linear pricing strategies (e.g., volume discounts or multi-part declining tariffs) that independent IXCs cannot

profitably match. Because the ILEC's private marginal cost of access is far less than an IXC's private marginal cost of access, it can profitably offer non-linear pricing packages for its long-distance service (or for bundles that include long-distance and local services) that include deeper discounts for marginal long-distance usage than can the IXCs, which cannot internalize (and thus eliminate) the distortion created by above-cost prices for access. This ability to profitably offer more attractive nonlinear price schedules to consumers means that ILEC could succeed in long-distance competition even though, on all aspects of competition other than price structure, its offering is inferior.[21]

---

[21]To see how the RBOCs' strategic advantage from nonlinear pricing can arise, consider the following simple example. Suppose that before RBOC entry, access prices were 10 cents per minute, the marginal cost of access was zero, the economic marginal cost of long-distance service was 10 cents per minute, and the price of long-distance service was 20 cents per minute. Consider a customer whose volume was 100 minutes per month.

Now allow RBOC entry without access reform. Suppose demand is linear, with an arc elasticity of minus one, over the 10-20¢ price range. Since access payments within the RBOC are a wash, the RBOC's marginal cost of long-distance is only 10 cents per minute (the economic marginal cost of long distance). The RBOC can offer a variety of very attractive deals. Consider this one: Customers can pay $14.99 per month plus 10 cents per minute. A customer who accepts will purchase 200 minutes of long-distance service (since the demand elasticity is one). The customer's total payments are $20 (200 minutes * 10 cents) + $14.99 = $34.99. The customer is better off with the RBOC's deal because the $14.99 monthly fee is less than the $15.00 increase in consumer welfare from paying 10 cents a minute rather than 20 cents a minute. (The increase in consumer welfare is 10¢ per unit on the original 100 units, plus an amount per unit on the next 100 units that declines linearly from 10¢ per unit to zero (i.e., another $5.00).

The IXCs cannot match this plan even if they are equally efficient in long distance. Their marginal costs are still 20 cents per minute, so their total costs for 200 minutes are $40. The plan is profitable for the RBOC even if it must "impute" the $10 in access fees the IXCs would have received from the customer at the old, 20 cents per minute price of long distance. The "opportunity cost" of the 200 units would be the economic cost of long distance of $20.00 plus the foregone access profits of $10.00, resulting in an total cost of $30.00. The RBOC makes a

Economists have long supported reform of access pricing. The ability to price more efficiently should not be limited to the ILECs, however, but that is exactly what would occur if ILECs are allowed to enter long distance before state and federal access price reform is completed. The profitability of nonlinear pricing depends on the level of access charges and of economic marginal costs and the percentage of long-distance calls that are completed within the ILECs' territory.

If fully exploited, this competitive advantage due to the nonlinear pricing advantage an ILEC derives from access mispricing can be equivalent to about 10% of average long-distance revenues excluding access payments, or about 6-7% of per unit revenues including access charges for calls that both originate and

---

profit before imputation of $14.99 on the customer ($34.99 revenue minus $20 in long-distance costs), and retains a profit of $4.99 after imputing $10 in access charges. In contrast, the IXC that matched the RBOC price would lose $5.01 on the customer.

terminate in its territory.[22] This is hardly a modest advantage, especially since long-distance profits are less than 10% of revenues.[23]

b) The RBOCs will have a competitive advantage in competing to provide switched service for the patronage of a customer for whom special access is a serious option. The RBOC faces no access opportunity cost, since if the customer chooses special access, the RBOC will earn no access revenues. Nonetheless, an IXC faces a private marginal access cost if it contemplates trying to compete with a switched service offering. As a result, the RBOC will be

---

[22]This calculation is based on a demand elasticity of -0.7 to -1.0 for long-distance service, an average long-distance price of 15 cents per minute, and access profit margins at both ends totaling 5 cents per minute. (Demand elasticity measures the sensitivity of consumers purchases to price. Demand is said to be inelastic when the elasticity is between 0 and -1.0.) For linear demands (demand curves that when plotted are straight lines) with these arc elasticities (the elasticity calculated between two points on a demand curve when the elasticity is not the same at all points), the RBOC's cost advantage is 12.5% with unitary elasticity, and 8.75% with a demand elasticity of -0.7. The equivalent cost disadvantage is larger for lower long-distance prices and higher access prices, and a ILEC's cost advantage is roughly one-half as large when it only controls one end of the phone call.

The RBOCs' artificial advantage is greater than that of smaller ILECs because of the greater frequency with which the RBOCs service both ends of a call. This advantage increases when RBOCs merge.

[23]We believe that, without access price corrections, the pricing advantage for the ILECs in long-distance service could be very substantial. Apparently BellSouth witness Dr. Hausman believes so as well. He is quoted by *The Economist* as saying that the Bells "will offer untimed long distance. Their customers really want that." See *The Economist*, "Survey Telecommunications," September 13, 1997, p. 10. The Bells' ability to offer untimed long distance service is a direct function of the fact that their private marginal costs of access are so low. The IXCs, saddled with excessive access charges, cannot compete effectively with such offerings solely because of the regulatory access price distortions. Per minute access charges are a private marginal cost to them but not to the ILECs.

uniquely positioned to win customers when the economic cost of switched access is less than that of special access.[24]

c) The RBOC will sometimes find it profitable to charge its affiliate lower de facto access charges than it charges independent IXCs, if for regulatory purposes the RBOC's access profits are assessed over the combined contributions of its long-distance affiliate and the IXCs, and if either federal or state access prices are subject to cost of service regulation or any price cap scheme with formal or informal profit-sharing.[25] In particular, if access profits are close to the point where regulators would be inclined to reduce the access rate, then waiving access fees for the affiliate but not for independent IXCs will be profitable. Access profits go down as the affiliate takes business away from independent IXCs, thus removing the threat that regulators will force an across-the-board access price reduction. Further, the RBOC's long-distance affiliate derives a competitive advantage: Its costs for the most important input are in fact lower than the costs paid for access by the IXCs. In effect, the RBOC is able to take profits via

---

[24]See Franklin M. Fisher, An Analysis of Switched Access Pricing and the Telecommunications Act of 1996, submitted as Attachment 1 to Reply Comments of MCI Telecommunications Corporation, CC Docket No. 96-98, filed with the FCC on May 30, 1996.

[25]That is, even though the affiliate "pays" the same access charge, on an integrated basis the true payment is less than the "hard costs" actually paid by the IXCs. The affiliate loses money but, in the circumstances described in the text, the discrimination is profitable on an integrated basis.

waiving access fees for its affiliate that it could not realize directly through access profit margins.

31. Note that these are not "price squeeze" arguments. In a price squeeze the competitive harm arises because the upstream monopolist effectively charges a lower price for its monopoly input to its own affiliate than to unaffiliated downstream competitors, thereby squeezing the margins of downstream competitors. The Federal Communications Commission and the Department of Justice, while acknowledging the possible theoretical validity of such arguments, have declined to base (or recommend basing) public policy on the possibility that RBOCs will engage in price squeezes.[26] In each of the cases described above, the ILEC obtains a competitive advantage because it alone is permitted by regulation to price most efficiently. Tilting the playing field to so favor the ILEC is inefficient and violates the recommendation of Schwartz and Farrell that the playing field be leveled at a higher level.[27] That would require pricing access at cost so that all long-distance carriers could price efficiently. Absent such reform, the ILEC can succeed in long-distance competition even though, in all respects other than price structure, it is less efficient that the other carriers.[28]

---

[26]See Affidavit of Marius Schwartz for DOJ, "Competitive Implications of Bell Operating Company Entry into Long-Distance Telecommunications Services," filed in CC Docket No. 97-121 (May 14, 1997) at paragraph 125.

[27]Schwartz Affidavit at paragraph 71.

[28]The argument that it is better for the ILEC alone to price efficiently than for no one to price efficiently is not compelling. If some protectionist states began enacting laws that allowed only the ILECs to use digital switches, while limiting everyone else to analog switches, would it be

B. Regulatory imputation cannot prevent the competitive problems arising from access price distortions.

32. First of all, regulatory "imputation," as conventionally practiced, only sets a low price floor on the LECs' service offerings to prevent blatant predatory pricing. As such, it does not and cannot address the competitive advantages described above that LECs will obtain in long-distance service so long as regulated access prices remain far above cost. In each of the cases described above, conventional regulatory imputation, even if perfectly administered (which is often far from the case) will not eliminate the ILEC's competitive advantage. As the only competitor whose private access costs are the true, and very low, marginal costs, the ILEC will have a competitive advantage unrelated to its efficiency as a long-distance carrier, and it will not need to price predatorily (and possibly violate the regulator's imputation standard) to realize the benefits of this advantage.[29]

33. Second, even if properly defined and enforced, an imputation standard is often nothing more than an internal accounting or bookkeeping measure. For an ILEC, imputing access

---

acceptable to argue that the RBOCs in those states should be allowed into long distance so that consumers could get the benefits of digital switching? We think not. Regulatory favoritism that limits deployment of more efficient business practices only to the favored ILECs, whether it involves efficient switches or efficient price structures, is both perverse and anticompetitive.

[29]We are not suggesting that perfect regulation could not solve the problem. By definition, perfect regulation can optimally solve any problem. However, in this context perfect regulation would require, at a minimum, that to correct the artificial competitive advantage associated with nonlinear pricing, the imputation test must be applied customer by customer and tariff element by tariff element. Even if attempted, such customer and element-specific regulation would be extremely expensive and, to say the least, is not likely to be administered perfectly.

charges means only that money is going from one pocket into the other. In contrast, for an IXC, paying access charges means that money goes from the IXC to the ILEC. Imputation does not change an integrated firm's profit maximizing strategy in circumstances where, such as described above, the imputation price constraints are not violated. In those circumstances, imputation provides no practical protection to competitors against the competitive advantages ILECs will have in pricing long-distance services.

34. Third, imputation is difficult to define and enforce. Proper imputation studies require that the ILEC service be carefully defined so that the precise elements of access can be properly imputed. Moreover, enforcement is always a practical problem. Competitive harm occurs as soon as an ILEC begins to offer the service. After-the-fact determinations that an ILEC service fails an imputation standard, months or years after the ILEC begins offering the service, does not help unless regulators award multiple damages to all rivals whose business was harmed. That is something that has generally not been done. With more and more toll offerings, the battles over imputation will become more and more complex.

C. Access "reform" that is limited to allowing market forces to operate in the local exchange is a highly imperfect remedy. Access prices should be prescriptively reduced to economic cost.

35. The "market" approach to access reform relies on increasing local competition to gradually bring access charges down to cost. There are two problems with this approach. First, even for originating access, this process may well require a very substantial degree of local

competition. The initial entrants into the local exchange markets, faced with limitations on their ability to expand capacity or increasing costs for more rapid expansion, may well not immediately bid down per unit prices for originating access. Given the very high current access profit margins and only a small, gradual, and localized loss of market share, the ILECs cannot be expected to respond with widespread cuts in originating access prices. The expected outcome does not change significantly if the ILECs are allowed to de-average access prices on a very localized basis. While the local price reductions may be larger and more immediate, originating access prices will not be bid down on a widespread basis until local competition is geographically widespread, since the ILEC will only cut prices where it faces actual competition.

36. Second, given current institutional arrangements for retail telephone pricing, local competition will affect terminating access charges only very slowly. The customer, when choosing its local carrier, also chooses the carrier who will carry its terminating access, in which case the local carrier "owns" the customer for termination. That "ownership" creates incentives to charge high terminating access prices, since the calling customer pays the entire cost of the call, even when competing facilities are physically able to terminate calls. As a result, competition will likely affect market-based terminating access charges more slowly than it will affect prices for originating access. The FCC's access charge order proposes reducing terminating access charges to 1.2 cents per minute. While this is a step in the right direction,

even the 1.2 cents per minute charge is well above the economic cost of providing terminating access.

IV. LOCAL COMPETITION

A. The role of effective local competition in preventing competitive abuses.

37. In the long-distance market, effective local competition can loosen an RBOC's current bottleneck control of essential facilities. To the extent effective local competition exists and to the extent interexchange carriers have the ability to influence the customer's choice of local providers (for example, by offering pricing plans that reflect reduced originating access charges), an RBOC's incentives to keep originating access rates high are reduced. Similarly, effective facilities-based local exchange competition would reduce an RBOC's incentives to engage in other (non-price) activity that would raise the cost to interexchange carriers.

38. In the local markets, effective facilities-based competition means that new entrants are no longer solely or substantially dependent on the RBOC to provide local service on a widespread basis. As a result, exclusionary behavior by the RBOC becomes less profitable and less likely, since exclusion is most profitable before the entrants have realized market acceptance sufficient to at least challenge the incumbent's market power.

B. The appropriate analytic standards for assessing local competition: How much local competition is enough to warrant allowing an RBOC into in-region, interLATA service?

39. Let us first define some terms. The term "facilities-based competition" in the local exchange market refers to competition from a supplier of local exchange services using its own (upstream) facilities. "UNE-based competition" in the local exchange market refers to competition from a supplier of local exchange services that purchases some of its upstream unbundled network elements from the ILEC. "Resale" refers to competition in the local exchange market based on firms that purchase the ILEC's local service at wholesale and resell that service to customers.

40. Resale competition by itself cannot provide effective local competition to the ILEC, and UNE-based competition has limited potential to provide fully effective local competition.

41. Resale is desirable for a number of reasons. In particular, resale inhibits price discrimination and thus reduces the ILEC's ability to fully exploit its market power at the upstream level (i.e., the wholesale, or UNE, stage). Resale may also facilitate eventual entry into the wholesale stage, by allowing entrants to establish a customer base before investing in their own facilities.[30] However, resale has no immediate effect on the ILEC's market power at the

[30]Resale of AT&T's long-distance services during the early years of long-distance competition did serve this function -- MCI, and later Sprint, were able to serve customers on a nationwide basis before they had nationwide facilities themselves.

upstream level. Resale by itself is thus not an answer to concerns over wholesale market power.[31] Even if an RBOC lost all its retail sales to resellers but only to resellers, with no competition from facilities-based entry or from competitors relying primarily on unbundled network elements, the RBOC would retain its wholesale market power, since it would face absolutely no competition at the wholesale stage. Most states have been setting resale discounts at around 20% of the retail price, implying that resale competitors will not be competing against RBOCs for over 80% of the value added in local service.[32]

42. Resale on a widespread basis has little effect on an ILEC's market power, so it would be especially inappropriate to view the mere possibility of future resale competition as a reason for concluding that an RBOC currently faces effective local competition. Resale may facilitate the development of local competition by allowing a new competitor to assemble an adequate customer base to warrant investing in its own facilities. That is the only way resale contributes to any local competition other than for retailing functions. If the wholesale discount turns out to

---

[31]Resale can help increase price competition at the wholesale stage when there are two or more wholesalers. Because resellers aggregate the demands of smaller customers, they can better negotiate low prices by threatening to take their combined volume of business elsewhere. A threat of this sort will not be credible in local telephone markets any time soon, however, since resellers, in almost all foreseeable circumstances, will have no other facilities-based supplier to which to turn as an alternative source of wholesale capacity.

[32]If the resale discount is 20%, resellers compete for considerably less than 20% of an RBOC's revenues from each customer, since the RBOC keeps access revenues even when a reseller captures the customer.

be too low to allow resale competitors to gain much share, the process of moving from resale to facilities-based competition could be cut off in its incipiency.

43. Competition based on UNEs is critical but is not a solution to the problem of discrimination once RBOCs that control upstream, bottleneck facilities are allowed into long distance. If the only meaningful competition to the ILEC in the downstream local exchange market comes from competitors purchasing UNEs at prices constrained by regulation, then the RBOC's prices at retail will remain largely determined by regulation, not by market forces.[33] As long as the prices for UNEs are constrained by regulation, the RBOC retains its incentive to evade regulation. Effective competition in the market for local exchange services would then require effective regulation in the market for upstream elements.

44. This is, however, easier said than done. Regulators have limited budgets, and it will be difficult to evaluate cost studies and claims of technical infeasibility. Even if we get to the point where customers and regulators agree that with today's technology the regulations are working well, one has to start all over again in developing regulatory benchmarks and other transaction criteria as technology changes. Thus, effective competition based on unbundled network elements is reversible. As discussed above, however, once allowed into interLATA long-distance service, an RBOC would lose any incentive to cooperate with CLECs in developing

[33]Even if retail prices fall below the maximum retail prices allowed by regulators, competition will only be setting the markup over the regulated price for unbundled network elements.

reasonable and nondiscriminatory terms for the sale of unbundled elements incorporating new technology. That is why the best evidence of local competition is actual, facilities-based entry. Once such investments have been made, the entrants are committed to the market for some period of time. And, because they control their own facilities, entrants and their customers are less susceptible to discrimination by the incumbent local monopolist.

45. In the absence of such facilities-based competition, regulation could be expected to be effective in controlling an RBOC's incentives to discriminate only if the transaction was standardized and not subject to significant technical change, and if natural benchmarks for reasonable performance and adequate enforcement mechanisms were in place.

46. Natural benchmarks might be derived from examining similar transactions where an RBOC had an incentive to complete the sale, as opposed to frustrate it. For example, it might turn out that the sale of unbundled loops will become a standardized transaction for a product that is expected to experience minimal technical change. If an RBOC's performance in provisioning unbundled loop service to customers it loses can be directly compared to its performance for customers it retains or recovers and if the IXC receives service comparable to that received today by a retail customer on new service orders, then natural benchmarks may be available.